

WITH THE ASSISTANCE OF THE
MEDICAL OFFICER OF HEALTH

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.

TWENTY-FIFTH

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

ON THE

Sanitary Condition of Newcastle-upon-Tyne,

WITH

TABULAR RETURNS

OF THE

SICKNESS AND MORTALITY

DURING THE YEAR 1897.



Newcastle-upon-Tyne :
TYNE PRINTING WORKS Co., 24 AND 26, SIDE.

1898.

CONTENTS.

GENERAL STATISTICS—	PAGE.
Rates of Mortality from all causes and the seven “Chief Zymotic Diseases,” 1868-1897	11
Deaths in Public Institutions	12
Deaths from each of the “Chief Zymotic Diseases” in each quarter of 1897	13
Infant Mortality	14
Uncertified Deaths	14
Marriages	15
INFECTIOUS DISEASE INQUIRY—	
Cases of Infectious Disease..	15
Different Diseases in the respective Wards of the City	15
No. of Households, &c., in which Infectious Disease was notified	16
Details referring to certain Infectious Diseases... ..	16
Businesses carried on on Infected Premises	17
Scarlet Fever and School Attendance	17
Diphtheria—In relation to Milk Supply... ..	18
Enteric Fever and Milk Supply	19
Puerperal Fever	19
Infectious Disease Inquiry and Disinfection	19
Compensation granted in connection with Infectious Disease	19
Cases of Infectious Disease in Public Institutions	20
CITY HOSPITAL FOR INFECTIOUS DISEASES—	
Admissions, &c....	21
SMALLPOX AND CHOLERA HOSPITALS, TOWN MOOR	22
PERCENTAGE OF CASES REMOVED TO HOSPITAL TO CASES NOTIFIED IN THE SAME FORM OF PRACTICE	22
EXPENSE OF MAINTENANCE IN HOSPITAL	22
BURIAL OF CORPSES ON JUSTICE’S ORDER	22
SUMMARY OF REPORTS MADE	23
WORK OF THE INSPECTORS OF THE HEALTH DEPARTMENT—	
Report of the Inspector of Nuisances	24-27
Report of the Inspector of Cattle, Provisions, &c.	28-29
HOUSES BUILT DURING THE YEAR—	
Accommodation provided	30
PLANS—Sanitary Alterations	30

APPENDIX A.

	PAGE.
Births and Deaths in City and Sub-districts. Numbers (Table I.)	31
Number of Deaths from different causes, City and Sub-districts (Table II.)	32-35
Annual Death-rate from all causes, and from the seven "Chief Zymotic Diseases"—Newcastle and Large Towns Compared (Table III.) ... }	36
Ages at Death (Table IV.)... ..	36
City Hospital for Infectious Diseases—Admissions and Deaths (Table V.)	37
Smallpox and Cholera Hospitals (Table VA.)	37
Disinfection Returns (Table VI.)	37
Provisions—Inspection Returns (Table VII.)	38
Nuisance Removal Returns (Table VIII.)	39
Works carried out in the Abatement of Nuisances (Table IX.)	40
Magisterial Proceedings (Table X.)	41-42
Food and Drugs Adulteration Acts—Analyses (Table XI.)	43-44
Common Lodging Houses, &c. Tables XII. and XIIA)	45

TO MR. ALD. NEWTON, J.P., L.F.P.S., CHAIRMAN OF THE
SANITARY COMMITTEE OF THE CORPORATION OF NEWCASTLE-
UPON-TYNE.

SIR,

Herewith I beg to submit to you my Twenty-fifth Annual Report, viz., that for the year 1897.

The *Death Rate* of Newcastle from "All Causes" during the year was 18·7 per 1,000 population. The average rate in 33 large towns in the United Kingdom was 19·1. Details as to the general mortality in the different Registration Sub-districts will be found at pages 32-35.

Marriages (see page 14). In the year ended 31st March, 1897, 2,173 marriages were registered in the Registration District of Newcastle-upon-Tyne (which includes the sub-district of Benwell and Fenham), an increase of 190 on the number (1,983) during the previous twelve months. This is the highest on record since the year 1874, when the number was 2,314.

Zymotic Diseases caused 348 deaths in 1897, against 374 in the previous year. Those from Measles, Whooping-Cough, and Diarrhoea were 96, 62, and 142 respectively, against 133, 95, and 77 in the previous year.

The number of deaths from *Scarlet Fever* was 24* against 23* in the previous year. The mortality from that disease per cent. to cases notified was 4·8, as compared with a rate of 2·6 for the year 1896. 496 cases of Scarlet Fever were notified in 1897, a decrease of 400 on the returns of the year before.

Enteric (or Typhoid) Fever caused 33* deaths, against the same number in the previous year. The rate of mortality to cases notified was 24·0 per cent., as compared with 18·7 in the year 1896. The number of cases notified (138) was 38 below that of the previous year's return.

*Corrected by distribution of those occurring in the City Hospital for Infectious Diseases, of persons belonging to the City.

Diphtheria caused 19* deaths, against 34* in 1896. The rate of mortality was 18·6 per cent. The total number of cases (102) notified shews a decrease of 62 below those of the previous year.

Measles.—Measles has continued prevalent throughout the year. The notifications, which during the last quarter of 1896 numbered 1,425, fell in the succeeding quarter, apparently under the influence of school closure and other preventive measures, to 801, but rose again in the summer quarter to 1,240, of which 963 occurred in the latter six weeks of that period. In the autumn quarter the number of cases declined to 522, and in the winter it was 653. The total for the entire year is therefore 3,216 cases. The Wards of the City most affected by the epidemic have been Elswick (North and South), Arthur's Hill, and Heaton. In each of these Wards are Elementary Schools, the congregation in which of large numbers of children has had greatly to do with the spread of infection, and the consequent maintenance of the epidemic. In November two Board Schools were fumigated throughout, and for a week after the floors were sprinkled daily with Sanitas powder. The result of this action was in each case a marked reduction of the disease. No actual steps have been taken by the Sanitary Authority during the year to close any school on account of the Measles epidemic, chiefly in the idea that beneficial effects would be less likely to follow closure in the middle of an epidemic than before it had gained a general hold on the community.

German Measles broke out in the Newcastle Workhouse in February, causing 103 cases in 18 days. The disease began in the Infants' Department, and the children affected were kept at the Workhouse. It afterwards extended to the Girls' Department. 39 of the latter cases were removed to the City Hospital for Infectious Disease. A total of 8 cases of the same disease occurring in the Orphanage, Moor Edge, were also removed to the Hospital. In November, German Measles again appeared in the Workhouse, and 22 cases were removed to the City Hospital for Infectious Diseases during the latter part of that month. Other

* Corrected by distribution of those occurring in the City Hospital for Infectious Diseases, of persons belonging to the City.

cases followed in December last, and these occupied one of the Hospital pavilions, thereby causing considerable crowding of the Scarlet Fever Blocks, and necessitating the refusal to admit a case of suspected Scarlet Fever, reported at the Out-Patients' Department of the Childrens' Hospital. At the time when this occurred, there was not an available Ward for Diphtheria. Happily no case presented itself for isolation at this juncture, otherwise it could not have been received.

As the cases reported were more than the Special Inspectors for Infectious Diseases and the staff connected with the Disinfecting Station, although working with energy, could cope with, other men were temporarily engaged to assist them.

Enteric Fever at a Country Dairy supplying Milk to Newcastle.—Toward the close of last year attention was drawn to the Milk custom of a certain dairyman in the Rural District, from the occurrence of certain cases of Enteric Fever among his customers in Newcastle. On obtaining a full list of these, 175 in number, the proportion of cases of Fever among them appeared suspicious. It was also ascertained that there were two other cases of Enteric Fever among consumers of the milk in question, not residing in Newcastle. The dairy was visited in January, 1898, by the Medical Officer of Health of Newcastle, who was met by the Medical Officer of Health, and Inspector of Nuisances, of the District. There had been no recent case of Enteric Fever on the premises, but the dairyman's medical attendant stated that six months previously the dairyman's wife suffered from a feverish illness with diarrhœa of a month's duration, suspected by him to be Enteric Fever. The premises were found to be in a very insanitary condition indeed, of which details were duly submitted, Sir, to your committee in a report in January, from which the following is an extract:—

“The conditions under which the milk is produced and stored are so grossly insanitary as to expose it to exceptional liability to contamination and to render the dairy in the opinion of the writer unfit for its purpose.”

“At present the Corporation have no legal power to prevent the sale of milk from any dairy—no matter what the circumstances may be. Such power is given in certain cases after illness has actually occurred under section 4 of the Infectious Diseases (Prevention) Act, 1890,—to Sanitary Authorities who adopt that section, which has not yet been done in Newcastle.”

“The circumstances and conditions of the dairy above described appear to illustrate rather forcibly the desirability of Sanitary Authorities being armed with protective power in such cases before mischief happens. Here is a large foul dairy, situated outside of the City by which it thrives, and in a neighbouring district without bye-laws. Ought the 175 City customers of that dairy to be exposed to constant danger without remedy until disease has actually broken out?”

“If the dairy were within the City it would be under regulation. In the preparation of a former Newcastle Improvement Bill, it was proposed to seek for powers to require that the Sanitary Authority should be satisfied as to the sanitary condition of dairies outside of the City before allowing them to send milk for sale here. That proposal was struck out, apparently on the sole ground of supposed impracticability. But in the case in point the practicability, and also the necessity, of such a provision are obvious.”

Scarlet Fever at St. Vincent's Home.—In October Scarlet Fever broke out among the boys at St. Vincent's Home. By the close of the year a total of 29 had been reported, all of whom were removed to Hospital.

Exposure of Infected Persons.—In January the Chief Constable reported to the Medical Officer of Health that a man named James Turner had placed two of his children, then suffering from Measles, in a cab, with the object of removing them from Waterloo Street to Buckingham Street, without informing the driver that they were suffering from an Infectious Disease. The children in question were afterwards notified to be suffering from Measles. The Sanitary Committee, on hearing the report of the circumstances, ordered Turner to be summoned, which was done, resulting in a fine of 10s. and costs.

House to House Inspection—Arthur's Hill Ward.—In last Annual Report the suspension of this work was referred to. By instruction of the committee it was resumed last spring, and has been carried on by the District Inspectors without assistance.

Examination of the Drains of New Houses.—In connexion with the examination and testing of the drains of new houses which was transferred in autumn to the Health Department, by the Sanitary and Town Improvement Committees, the Medical Officer of Health, with the approval of the Sanitary Committee, strengthened the staff by the engagement of three additional Assistant Inspectors, who entered on duty in September. Details of the new drain work examined and tested from that date will be found in the report of the Inspector of Nuisances.—(p. 24).

Bacteriological Examination of Water.—The question of the Bacteriological Examination of the Water Supply was under the consideration of the Sanitary Committee toward the close of the year, when this subject and other matters relating thereto, were referred to the City Engineer and Medical Officer of Health, and form material for a future report.

Hospitals for Infectious Diseases.—443 patients have been admitted to the City Hospital for Infectious Diseases at Walker Gate, an increase of 12 on the previous year's return. The proportion of patients in private medical practice removed to Hospital was 29·7 per cent. of the cases (other than Measles and Whooping Cough) notified in same form of practice. The proportion of cases (other than Measles and Whooping-Cough) notified in public practice (including those of the Dispensary) removed to Hospital was 84·5 per cent., as compared with 80·7 per cent. for the previous year.

The mortality to cases was 7·4 per cent. Details are given on pages 21 and 37.

The Smallpox Hospital has been unoccupied during the year. One case of suspected Cholera admitted to the Cholera Hospital in May proved to be Dysenteric Diarrhœa.

Infant Mortality.—The deaths of Infants under one year of age (1,203) show an increase of 96 over the returns for 1896 (1,107) (see pages 14 and 36).

The *Uncertified Deaths* registered are 36 against 16 in the preceding year.

The number of *Cases of Infectious Diseases Notified* by Medical Practitioners (see page 15) is 5,283 against 3,137 in the previous year. The increase is due to the notification of Measles and Whooping Cough (4,531 cases). The notified cases of other infectious disease are less in number by 496 than during the previous year.

THE WORK OF THE HEALTH DEPARTMENT.

The Reports of the Inspectors are given on pages 24 to 29, and the returns of their work will be found in Appendix A, (Tables VII. to XIIA).

22,027 *Inspections of Tenement Property* have been made during the year. The number of contraventions of the Bye-laws returned is 1,455, as compared with 1,030 last year.

137 cases of *nuisance* have been ordered to be taken before the magistrates, a decrease of 9 below the previous year's return.

HOUSING OF THE WORKING CLASSES ACT, 1890.

No representation under the Act has been made during the year.

Sellar's Entry, Sandgate.—As required by the Sanitary Committee, the Medical Officer of Health reported in September on certain rooms, ordered by the Magistrates to be closed, but which had remained occupied for a considerable time after the order. They were closed at the date of report.

CUSTOMS AND INLAND REVENUE ACT, 1890, s. 26 (2).

Applications for Certificates entitling the owners to exemption from Inhabited House Duty have been made during the year in respect of 6 Tenement Houses. After examination of the respective properties, one Certificate only, on the form amended and adopted by the Sanitary Committee in 1895, was given.

FACTORY AND WORKSHOP ACTS.

Last year 53 "Workshops," including 77 Workrooms, were reported by H.M. Inspector of Factories to the Medical Officer of Health on account of nuisance or sanitary defect. On examination, various insanitary conditions, as specified by the Inspector of Nuisances in his report, were dealt with.

HOUSEBUILDING IN THE CITY.

New accommodation has been provided for 1,173 families against provision for 895 during the previous year.

I have the honour to be,

Sir,

Your obedient Servant,

HENRY E. ARMSTRONG, D.H.Y.,

MEDICAL OFFICER OF HEALTH.

*Health Department,
Town Hall,
Newcastle-upon-Tyne,
4th April, 1898.*

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.

REPORT, 1897.

GENERAL STATISTICS.

DURING the 52 weeks ended 1st January, 1898, 6,795 births and 4,066 deaths have been registered in the City. The births represent a rate of 31·2 and the deaths a rate of 18·7* per 1,000 of a population of 217,555 at all ages, as estimated by the Registrar General to the middle of the year.

The following is a Table of the recorded rates of mortality from all causes, and the seven “Chief Zymotic Diseases,” for the year under report and previous years :—

RATES OF MORTALITY PER 1,000 POPULATION OF NEWCASTLE-UPON-TYNE.

A.D.				All Causes.	Seven “Chief Zymotic Diseases.”			
1868	...	...	...	27·1	..	...	...	?
1869	...	...	...	27·2	...	...	...	?
1870	...	...	...	25·4	...	...	...	3·9
1871	..	...	...	32·2	...	..	...	9·3
1872	...	..	...	26·3	...	...	...	4·5
1873	...	...	...	30·1	..	...	...	6·9
1874	...	...	..	29·2	...	...	...	5·5
1875	..	...	...	26·1	...	...	...	3·6
1876	...	...	..	22·7	...	...	..	2·6
1877	...	...	...	22·3	...	...	...	2·5
1878	...	...	..	23·7	...	...	...	4·6
1879	...	...	...	23·5	...	...	...	3·9
1880	...	...	...	22·3	.	...	...	3·2
1881	...	...	...	21·7	...	...	...	2·6
1882	...	...	...	23·0	..	...	...	3·3
1883	...	...	...	25·4	...	...	...	4·3
1884	...	...	...	23·5	...	...	...	3·2
1885	...	...	...	26·0	...	...	..	4·4
1886	..	...	...	22·2	...	...	...	2·5
1887	...	...	...	25·2	...	...	...	3·3
1888	...	...	...	20·5	...	...	..	1·4
1889	...	...	...	25·0	...	...	...	3·0
1890	...	...	...	26·2	...	...	...	2·1
1891	...	...	...	23·6	...	...	...	2·5
1892	...	...	...	19·5	...	...	...	1·5
1893	...	...	...	20·9	...	..	..	2·3
1894	...	...	...	18·0	...	...	...	1·9
1895	...	...	...	20·0	...	...	...	2·1
1896	...	...	...	18·4	...	...	..	1·8
1897	...	...	...	18·7	...	...	...	1·6†

* This return does not include the deaths in the City Hospital for Infectious Diseases, 31 in number, of persons belonging to Newcastle. With these included the death-rate is 18·8 per 1,000. Deducting deaths (209) in the Infirmary of persons who came there from beyond the City boundary the rate is 17·7.

† Deducting deaths from diseases not ordinarily notifiable (Measles, 96; Whooping Cough, 62; and Diarrhœa, 142), the rate is 0·2.

Births and
Deaths.

The number of births and deaths in the different Registration Sub-districts of the City during 1897 is given in Appendix A, Table I.

Deaths in
Public
Institutions.

The Deaths in Public Institutions, &c., in the different Registration Sub-districts during the 52 weeks ended 1st January, 1898, are as follows :—

REGISTRATION SUB-DISTRICTS.	INSTITUTION.				DEATHS.
Westgate ...	{	Union Workhouse ...	...	...	213
		St. Joseph's House ...	...	...	28
		St. Vincent's Home ...	...	...	1
St. Andrew's ...	{	Magdalene Hospital ..	.	...	5
		Hospital for Incurables	...	...	8
		Barracks (Military) ...	...	...	5
		Central Police Station	..	...	1
		Eye Infirmary	...	...	1
St. Nicholas'	...	Royal Infirmary	...	...	363
All Saints'...	{	H.M. Prison ...	...	...	1
		Holy Jesus Hospital	...	...	4
		Lying-in Hospital	...	...	1
Byker ...	{	Fleming Memorial Hospital	..	...	57
		Northern Counties Orphanage	...	...	1
Total					689

Deaths from
Miasmatic
order of
Zymotic
Diseases.

The condition of the different Registration Sub-Districts in regard of mortality from the Miasmatic order* of Zymotic diseases during the year is as given in Appendix A, Table II.

Diarrhœa,
Measles, and
Whooping-
Cough.

The most fatal Zymotic diseases have been Diarrhœa, Measles, and Whooping-Cough, from which 142, 96, and 62 deaths respectively are returned.

INFANT MORTALITY.

Infant
Mortality

The number of Infants dying before the completion of the first year of life is 1,203, as compared with 1,107, 1,196, and 980, respectively, in 1896, 1895, and 1894.

REGISTRATION SUB-DISTRICTS.	Deaths of Children under 1 year of age.		Rates per cent. of Deaths under 1 year to Births registered.	
	1897.	1896.	1897.	1896.
Westgate... ..	482	470	16·3	16·0
St. Andrew's	85	81	18·1	16·0
St. Nicholas'	50	35	27·8	18·9
All Saints'	185	171	20·0	19·5
Byker	401	350	17·7	16·0
City	1,203	1,107	17·7	16·5

UNCERTIFIED DEATHS DURING THE YEAR 1897.

Uncertified
Deaths.

36 deaths have been registered for which no proper medical certificate has been given or inquest held, as compared with 16 during the previous year.

MARRIAGES.

Marriages.

The number of marriages registered in Newcastle-upon-Tyne (Superintendent Registrar's district), during each of the past ten years (1888-97), is as under :—

Year. ended March 31.	Number of Marriages.	Year ended March 31.	Number of Marriages.
1888	1,829	1893	1,892
1889	1,874	1894	1,812
1890	2,020	1895	1,851
1891	2,124	1896	1,983
1892	1,894	1897	2,173

* In uniformity with the Classification of causes of death adopted by the Registrar General, Diarrhœal diseases are now excluded from the Miasmatic order of the Zymotic class of diseases. The deaths from these diseases are stated in the Table on previous page.

† Superintendent Registrar's district, which includes the Municipal area and the Extra-Municipal Townships of Benwell and Fenham.

INFECTIOUS DISEASES INQUIRY.

CASES OF INFECTIOUS DISEASE KNOWN TO THE HEALTH DEPARTMENT.

During the year under report the following cases of Infectious Disease have been made known to the Medical Officer of Health by medical practitioners and otherwise.

Notification
of Infectious
Disease.

					CASES KNOWN TO THE HEALTH DEPARTMENT.	
					1897.	1896.
Cholera	...	...	...	...	...	..
Smallpox	...	...	...	...	...	...
Measles	...	...	...	..	3,216	1,505*
Scarlet Fever	...	...	...	...	496	896
Diphtheria	...	...	...	..	102	164
Whooping-Cough	...	...	...	...	1,315	380*
Typhus	...	...	...	...	...	...
Enteric (or Typhoid) Fever	...	...	...	...	138	176
Simple Continued Fever	...	...	...	...	13	10
Puerperal Fever	...	...	...	...	7	6
Relapsing Fever	...	...	...	...	...	...
TOTAL	...	...	...	...	5,287	3,137

A Return to the Local Government Board of the Notifications during the previous week has been forwarded each Monday morning during the year, on forms supplied for the purpose.

The following Table shows the different diseases in the respective Wards of the City :—

Infectious
Diseases
in the
respective
Wards of the
City.

WARDS.	Measles.	Scarlet Fever.	Diph- theria.	Whooping Cough.	Enteric(or Typhoid) Fever.	Continued Fever.	Puerperal Fever.	TOTAL.
Elswick East ...	182	24	1	63	7	...	...	277
Elswick North ...	279	23	9	155	3	...	...	469
Elswick South ...	361	51	7	132	8	..	1	560
Arthur's Hill ...	620	59	13	186	5	3	2	888
Westgate North ..	169	20	2	101	11	...	1	304
Westgate South ...	103	21	1	50	16	1	...	192
St. Andrew's North.	184	21	...	70	12	1	...	288
St. John's ...	21	2	...	6	...	...	...	29
St. Nicholas' ...	77	2	...	15	8	...	1	103
All Saints' West ...	106	5	1	23	1	1	...	137
All Saints' East ...	131	24	6	111	15	1	1	289
All Saints' North ...	98	49	1	44	20	...	...	212
St. Andrew's South.	77	4	1	31	1	...	...	114
Jesmond ...	184	31	6	38	7	...	...	266
Heaton ..	436	59	32	40	8	...	...	575
Byker ...	188	101	22	250	16	6	1	584
City ...	3,216	496	102	1,315	138	13	7	5,287

* Notification of Measles and Whooping-Cough began on 26th August, 1896,

No. of
Infected
Households,
&c.

RETURN SHOWING THE NUMBER OF HOUSEHOLDS, &C., IN WHICH
CERTAIN INFECTIOUS DISEASES WERE NOTIFIED DURING THE YEAR 1897.

DISEASES.	HOUSEHOLDS WITH					Public Institu- tions.	TOTAL.
	Single Cases.	2 Cases each.	3 Cases each.	4 Cases each.	5 Cases each.		
Scarlet Fever ...	261	57	11	9	2	6	346
Diphtheria ...	64	10	2	2	...	1	79
Enteric (or Typhoid) Fever }	99	5	3	...	2	3	112
Continued Fever	9	2	...	...	...	...	11
Puerperal Fever	7	...	...	...	...	...	7
TOTAL ...	440	74	16	11	4	10	555

DETAILS REFERRING TO CERTAIN INFECTIOUS DISEASES DURING 1897.

	Scarlet Fever.	Diph- theria.	Enteric or Typhoid Fever.	Con- tinued Fever.
Number of households infected	340	78	109	11
Number of sick-rooms returned as not at all isolated from the rest of the premises, the families either having access to, or living in the sick-room ...	127	23	42	4
Number of sick-rooms where no means to prevent infection were being taken ...	133	22	39	7
Number of occupants of infected houses employed at shops, &c., or in occupa- tions elsewhere	448	95	201	16

RETURN shewing businesses carried on on certain infected premises, Business carried on on Infected Premises. whereby infection was liable to be communicated to customers, &c. :—

Business, &c.	SCARLET FEVER.		DIPHTHERIA.		ENTERIC (or TYPHOID) FEVER.	
	No. of		No. of		No. of	
	House-holds.	Cases.	House-holds.	Cases.	House-holds.	Cases.
Butcher	1	1	...	...	...	...
Dressmaking ... ..	...	...	...	...	1	1
Fish Dealer... ..	...	...	1	1	...	...
General Dealer	1	1	...	...	...	...
Grocer and Provision Dealer }	3	3	2	2	1	1
Hairdresser... ..	1	1	...	...	...	...
Hotel	2	2	...	...	...	...
Medical Practitioner...	1	2	...	...	...	...
Private School ... ..	...	...	1	1	...	...
Public House	6	6	..	...	2	2
Servants' Registry Office } ... ..	...	...	1	4	...	...
Small Sweet Shop ...	3	3	1	1	1	1
Travelling Draper ...	1	2	...	...	...	...

Scarlet Fever in relation to School Attendance.—Of the households infected with Scarlet Fever, 285 contained scholars of one or other of 72 different schools in the City. In 10 of the largest elementary schools, scholars came from upwards of 10 of such households during the year, the largest number of scholars from infected households attending any one school being 17.

In two schools there was infection in the households of its scholars during eight months of the year, and in three others during seven months.

Rate of
Scarlet
Fever in
Board
Schools.

Rate of Scarlet Fever in Board Schools.—Through the courtesy of the Clerk to the School Board, Mr. A. Goddard, who has furnished the average daily attendance at each of the Board Schools of the City, it has been possible to prepare the subjoined statement, shewing the percentage of households of scholars in which Scarlet Fever was notified to the average number of scholars in each school:—

Board School.						Per cent. of House- holds infected with Scarlet Fever.
Arthur's Hill	...	...	...	...	...	1·2
Bentinck	...	...	...	...	...	0·7
Blenheim Street	...	...	...	...	...	1·1
Chillingham Road	...	...	...	...	...	0·8
Diana Street	...	...	...	...	...	1·3
Elswick Road	...	..	...	...	...	0·2
Heaton Park Road	...	...	...	...	...	1·0
Longley Street	..	...	...	...	...	1·8
Ouseburn	...	...	..	...	...	0·4
Raby Street	...	...	...	...	...	0·1
Royal Jubilee	...	...	...	...	...	0·5
Scotswood Road	...	...	...	...	...	0·5
Shieldfield	...	...	..	...	..	2·3
Spital Tongues	...	...	...	...	...	1·3
Saint Peter's	...	..	..	...	...	0·7
Tindal Street	...	...	...	...	...	1·0
Todd's Nook	..	...	...	...	...	0·9
Union British, Bath Lane	...	...	...	...	...	1·0
Victoria Jubilee	...	...	...	...	...	1·2
Westmorland Road	...	...	...	...	...	1·1

As usual circulars have been sent to the principals of the respective schools attended by pupils from houses notified to be occupied by cases of Infectious Disease, and certificates of final disinfection after this was done.

Diphtheria
and Milk
Supply.

Diphtheria in Relation to Milk Supply.—The households affected were supplied by a large number of dealers. There is no reason to suppose that any outbreak was attributable to milk. 4 dairies supplied milk to more than 1 infected household, viz. :—

1 Dairy	...	...	...	...	*14 households.
1 „	...	...	...	...	*5 „
1 „	...	...	...	...	4 „
1 „	...	...	...	...	2 „

* Large Dairies. The cases were spread over many months of the year.

Enteric Fever and Milk Supply.—The milk supplies of the household infected with Enteric Fever were derived as follows :—

Enteric
Fever & Milk
Supply.

1 Dairy supplied	...	..	...	*9 households.
1 „ „	...	...	...	*7 „
1 „ „	...	...	...	3 „
4 Dairies „	...	...	...	2 „ each.

Each of the remaining households was supplied by a separate dairy.

* These dairies supply a large number of persons, and have branch establishments in several parts of the city. The cases of Enteric Fever in question were spread over the year. There is no reason to blame the milk supply for their occurrence.

PUERPERAL FEVER.

The following details refer to Puerperal Fever during the year 1897 :—

Puerperal
Fever

Inquiries were made in 7 households containing 7 cases.

Two of the cases were attended by the same medical practitioner. Three of the cases were attended by midwives, who were cautioned against continuing practice until the lapse of a period of two months after the respective confinements. This injunction is believed to have been attended to. Compensation for loss of practice was granted by the Sanitary Committee.

Infectious Disease Inquiry and Disinfection.—5,287 cases of notifiable infectious disease have been inquired into by the Special Inspectors, with temporary assistance, and the houses or rooms connected therewith disinfected, as compared with 3,137 during the year before. The bedding and other infected articles were removed to the Disinfecting Station, and, after purification, returned to the owners. (For List, see Appendix A, Table VI.)

Disease
Inquiry

Compensation granted on account of Infection.—In 6 cases compensation has been allowed by the Sanitary Committee to the occupiers of infected houses, for clothing, confectionery, &c., destroyed.

Compensa-
tion.

Infectious
Disease in
Public
Institutions
&c.

INFECTIOUS CASES NOTIFIED IN PUBLIC INSTITUTIONS, &c.

INSTITUTIONS, &c.	Measles	Scarlet Fever.	Diph- theria.	Whoop- ing Cough.	Enteric Fever.	TOTAL.
Royal Infirmary	2	4	...	..	8	14
Fleming Memorial Hospital for Sick Children, Moor Edge	...	1	4	7	1	13
Barracks (Military)	4	2	...	22	...	28
St. Vincent's Home, Brunel Terrace ... ..	...	29	...	...	...	29
Union Workhouse	173	5	...	2	..	180
Girls' Orphanage, North Road..	11	...	...	...	...	11
Headlam Street Police Station	...	..	...	...	1	1
Magdalene Hospital	1	...	...	...	...	1
Children's Hospital, City Road	2	1	...	7	...	10
Dispensary, Nelson Street ...	...	...	...	1	...	1
Totals	193	42	4	39	10	288

CITY HOSPITAL FOR INFECTIOUS DISEASES.*

443 patients have been treated at the City Hospital for Infectious Diseases at Walker Gate during the year, including 8 admitted from the Walker Urban District. The cases were as under:—

Work at the City Hos-
pital for
Infectious
Diseases.

Removed to Hospital on notification as	After observation proved to be																					
	No. of Cases.	Measles.	German Measles.	Scarlet Fever and Measles.	Scarlet Fever.	Scarlet Fever and Varicella.	Scarlet Fever and Diphtheria.	Scarlet Fever and Miliary Tubercu- losis.	Scarlet Fever and Meningitis.	Scarlet Fever and Broncho-Pneu- monia.	Diphtheria.	Diphtheria and Pneumonia.	Enteric Fever.	Enteric Fever and Broncho-Pneu- monia.	Continued Fever.	Puerperal Fever.	Eczema.	General Paralysis of the Insane.	Pleurisy and Pneumonia	Tonsillitis.	Gastro-Enteritis.	Surgical Case.
Measles ...	95	38	55	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
German Measles ...	49	...	49	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	213	1	..	...	198	7	1	1	1	2	...	...	...	...	...	1	1	...	...	...	...	...
Diphtheria...	14	...	...	...	...	...	...	...	...	...	9	1	...	...	...	...	...	...	...	4	...	...
Enteric Fever ...	69	..	...	...	...	...	...	...	...	...	..	...	61	1	1	...	...	1	2	..	3	...
Continued Fever ...	3	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	1
TOTALS ...	443	39	104	1	199	7	1	1	1	2	9	1	63	1	1	1	1	1	2	4	3	1

* For other details see Appendix A, Table V.

Smallpox
Hospital.

SMALLPOX HOSPITAL.

No admission during the year.

Cholera
Hospital

CHOLERA HOSPITAL.

One suspected case admitted—proved to be non-infectious.

NOTIFIED CASES OF INFECTIOUS DISEASE (OTHER THAN MEASLES AND WHOOPING
COUGH) REMOVED TO THE CITY HOSPITAL FOR INFECTIOUS DISEASES,
WALKER GATE, DURING 1897.

	No. of cases Removed.	Rate per cent. of cases re- moved to cases notified in the same form of practice.
In private practice ...	190	29·7
In Dispensary practice ..	69	83·1
In public practice (including Dispensary) ...	98	84·5

Expense of
Mainten-
ance of
Patients

Expense of Maintenance.—Of the patients admitted, the expense
of maintenance is charged as under :—

	Cases
To the Sanitary Authority ...	394
To private guarantors (General Wards) ...	36
„ „ (Private Wards) ...	13
Total ...	443

BURIAL OF CORPSES.

Burial of
Corpses
under Local
Act.

Under the 47th Section of the “Newcastle-upon-Tyne Improve-
ment Act, 1882,” Orders of Justice have been obtained during the past
year as follows :—

For Burial of Corpses from rooms in which persons live or sleep ..	20
„ „ Royal Infirmary ..	11
„ „ Fleming Memorial Hospital ...	5
Total ...	36

SUMMARY OF REPORTS MADE DURING 1897.

The following, among other matters, have been brought before the Sanitary Committee during the year :—

Summary of
Reports, &c.
made during
the year.

ZYMOTIC DISEASES.

	DATE.
Measles Epidemic and School Closure	Jan.
„ Cases removed in a Public Conveyance	Jan.
„ Cases not notified	Feb., Mar., & Oct.
German Measles at the Workhouse and Orphanage	Feb.
Measles and Whooping-Cough	June
Measles and Schools—Disinfection of Board Schools	Oct. and Nov.
German Measles in the Workhouse	Nov. and Dec.
Scarlet Fever at a Dairy sending Milk to Newcastle ..	June
Scarlet Fever not Notified	Aug.
Scarlet Fever in St. Vincent's Home	Nov.
Diphtheria and Cleansing of Ashpits	Oct.
Enteric Fever at a Dairy sending milk to Newcastle ...	Jan.
Puerperal Fever and Midwife's Practice	Mar., June, & Oct.
Suspected Cholera	May
Infantile Summer Diarrhœa and Milk Supply ..	Aug.

CITY HOSPITAL FOR INFECTIOUS DISEASES.

Engineer affected with Scarlet Fever	April and May
Nurse affected with Enteric Fever	May
„ „ Diphtheria	Oct.
Death of Police Inspector Lumsden from Enteric Fever ...	Oct.
Accommodation for Visitors to Patients ..	Nov.

GENERAL.

Factory and Workshop Act, 1895 (Fire Escape)	Feb.
Pollution of Oyster Fisheries with Sewage	April
Common Lodging House, Quayside	April
Water in Ponds on Town Moor	July
Examination of Drains of New Houses—Appointment of Assistant Inspectors	Sept.
The Sanitary Institute	Oct.
Additional Temporary Assistance for Disinfection	Oct.
Canned Fruits and Poisonous Metals	Oct. and Nov.
Bacteriological Examination of Water	Nov.

LOCALITIES.

Mundella Terrace, Heaton (Paving)	Jan.
Arthur's Hill Ward—House-to-House Inspection	April
New Streets at Heaton	April
Housing of the Working Classes Act, 1890—Sellar's Entry, Sandgate	Sept.
Lambert's Leap	Oct.
Groves' Quarry—made ground	Oct. and Nov.

General
Work of the
Health
Department

WORK OF THE INSPECTORS OF THE HEALTH DEPARTMENT.

The Report of Mr. W. H. Wells, Inspector of Nuisances, is given below :—

TO THE MEDICAL OFFICER OF HEALTH.

SIR,

I beg to present you my report of the work done in my section of the Health Department during the year ending 31st December, 1897, which includes Tables Nos. VIII. to XIIA. (Appendix A.)

Nuisance
Abatement

Nuisance Abatement.—The details of this work are shewn in Tables VIII. and IX. (Appendix A.) There have been 185 privies with ashpits removed, and either water-closets or pail-closets provided instead.

Magisterial
Proceedings

Magisterial Proceedings for abatement of Nuisances, &c.—Particulars are given in Appendix A. Table X.

Tenement
Bye-laws.

Tenement Bye-Laws.—The houses in Meeting House Lane, mentioned in last year's report, have been closed, and several water-closets have been erected in the alleys off Sandgate. The latter, however, does not make the houses there all they should be as dwellings.

I have to report, as before, that the conduct of the occupiers of tenements is much improved since the bye-laws were put into force, but the almost daily presence of the District Inspector is needed to maintain the improvement.

House-to-
House In-
spection in
Arthur's
Hill.

House-to-House Inspection in Arthur's Hill.—This work was recommenced by order of the Sanitary Committee on March 25th, 1897, by the District Inspector, and was carried on in the ordinary district work without assistance. 296 drains were tested, of which 188, or 63·5 per cent., were found to be defective. All the defects were dealt with.

Drains of
New
Buildings.

Drains of New Buildings.—In August the Authority ordered the Health Department to undertake the work of testing drains in new buildings.

Three additional officers were appointed for the purpose, and the work commenced on September 20th. The amount of work done to the end of the year is shown in tabular form, as follows :—

No. of Drains Tested with Water.	No. of Drains Tested with Smoke.	Supplementary Tests.	Supervisions of Works in Progress.	Visits to Learn if Works are in Progress.	Final Examinations.
164	104	10	905	835	11

The reason for testing some drains with smoke instead of water is that some builders refuse to provide intercepting traps or access chambers upon the drains.

It is, under these circumstances, not possible to plug the drains for the water test, and the smoke test—the only alternative—is lessened in value from the same cause.

The building regulations of the city as to drains are imperfect, and, amongst other things, do not provide for intercepting traps, or even for efficient ventilation of drains. Before this work can be in all points satisfactorily carried out, new regulations must be made.

The final examinations in the table mean those made when the whole sanitary system of the new building is completed, *i.e.*, w.c., &c., fixed, the prior tests having been applied to the drains alone before filling in of trenches, and therefore before the plumbing work has been begun.

Bakehouses.—The Retail Bakehouses (65) have been systematically inspected every six months, and at other times. The Wholesale Bakehouses (13) are under the superintendence of the Government Inspector of Factories.

Offensive Trades.—The following establishments—Triperies (11), Marine Stores (23), Blood Drying (1), Chemical Manure Works (1), Fish Curing (9), Knackeries (2), Soap Works (4), Tanneries (3), and Leather Dressing (3) have been regularly attended to as to cleansing, &c.

Common Lodging Houses.—These houses have been well conducted. Four of the older houses have been closed, and six new ones placed upon the Register.

The average number of lodgers per night was 1,507.

The highest and lowest numbers on any one night were respectively 1,597 and 1,372. For details see Appendix A, Tables XII. and XIIA.

Factory and Workshop Acts.—53 Workshops, which included 77 Workrooms, were inspected during the year. 107 sanitary defects were found, and remedied, as follows:—

Dirty rooms	...	...	...	...	...	...	...	36
Insufficient ventilation to rooms				...	...	...	...	1
Overcrowded rooms	...	..	...	...	...	...	...	8
Dirty passages and staircases	...	..	...	...	...	..		11
Gas Stoves without means provided to carry away the fumes	...	...	...	...	...	...	...	4
Gas Irons without means provided to carry off the fumes	...							4
No water-closet accommodation			...	...	...	...		10
Insufficient water-closet accommodation					...	...	...	6
Defective water-closets	...	...	...	...	...	...	...	4
Choked water-closets	...	...	...	...	...	...	...	3
Dirty water-closets	...	...	...	...	...	...	...	2
No water supply to water-closet			...	...	...	...	...	1
Defective pail-closet	...	...	...	...	...	...	...	1
Defective drains	...	..	..	...	...	...	...	2
Dirty bakehouse	...	...	...	...	...	...	...	1
Foul manure pits under workrooms and foul accumulations								3
Defective yard pavements		...	...	...	...	...	...	4
Insufficient provision for escape in case of fire						...	...	1
Dirty yards	...	...	...	..	...	...	...	3
Broken roofs and spouting		...	...	...	...	...	...	1
Want of a urinal to workshop	...	...	...	...	...	...	...	1
						Total...	...	107

I will again remark, that by the instruction of the Sanitary Authority, only such workshops and factories are examined as are complained of to the Department. Further visits are periodically made to all such workshops, so far as can be done with the present staff, the number on our books being now 499.

Adulteration Acts.—The number of milk samples purchased during the year is 266. Only 2·63% of these were certified to be adulterated. Most of the milk samples are first tested in the office with hydrometer and cremometer. Of these 26 were considered to be doubtful, and sent to the Public Analyst, who certified six of them to be adulterated and five doubtful. Adultera-
tion Acts

37 of the samples were sent direct to the Analyst without previous test. Of these one was certified to be adulterated and four doubtful.

The total number of samples of foods and drugs taken during the year is 397, against 406 in 1896. (For details see Appendix A, Table XI).

The assistance of the staff has been freely sought by the public during the year.

I am, Sir,

Your obedient Servant,

W. H. WELLS,

INSPECTOR OF NUISANCES, COMMON
LODGING HOUSES, &c.

Health Department,

Town Hall,

25th February, 1898.

The following is the report of Inspector Hedley :—

TO THE MEDICAL OFFICER OF HEALTH.

SIR,

I beg to present you with the following report for the year ending December 31st, 1897.

The general health of the cattle in the City has been satisfactory throughout the year. There has been only one outbreak of Swine Fever, two swine being affected. They were killed, and the carcasses were destroyed.

Two persons were summoned for removing diseased swine from the County of Northumberland into the City. They were fined £5 and costs each.

Cow-sheds. — These have been regularly inspected during the year, and several necessary repairs made on the verbal request of the Inspector. In one case the occupier having declined to put his premises in good sanitary condition, was summoned, and fined £5 and costs. The place has been closed since.

Two persons have ceased to keep milch cows in the City, leaving only 65 who keep cows for the purpose of supplying milk to the public.

Two outbreaks of Measles have occurred in the families of Dairymen. In one case, the patient was removed to Hospital; in the other, all communication was cut off between the patient and the milk supply. No spread of infection is known to have occurred through the milk.

Slaughter Houses.—Little change has taken place. Two have been closed during the year, the premises being required for other purposes. 126 were licensed at the end of the year.

Fish Destroyed during 1897.—

Salmon and Salmon Trout.—82 Fish.
 Ling.—2 Barrels, 2 Boxes, and 6 Fish.
 Skate.—5 Barrels.
 Haddocks.—2 Boxes.
 Herrings, (Fresh).—7 Large Boxes,
 10½ cwt.
 Sprats.—1 Barrel and 4 Boxes.

Mackeral.—40 Fish. } By order
 Plaice.—19 Fish. } of Justice.
 Findon Haddocks.—135 Boxes.
 Kipperd Herring.—541 Boxes.
 Bloaters.—11 Boxes.
 Mussels.—19 Bags.

One person was summoned and fined 10 shillings and costs for exposing bad fish for sale.

Diseased Meat and other Provisions.—A return of the diseased meat and other unsound provisions dealt with during the year, and the magisterial proceedings resulting thereon, is given in the Appendix A, Table VII.

I am, Sir,

Your obedient Servant,

WM. HEDLEY,

INSPECTOR OF CATTLE, PROVISIONS, &c.

Health Department,

Town Hall,

Newcastle-on-Tyne,

24th Feb., 1897.

HOUSES BUILT DURING THE YEAR 1897.

House-
building.

The following return of houses built during the year under report is supplied through the courtesy of the City Engineer :—

Newcastle-upon-Tyne.			Houses. Self-contained.	Houses of Two Flats each.
Elswick Township	...	...	8	87
Westgate Township	...	..	1	23
Byker Township	...	...	3	209
Jesmond Township	...	...	92	179
Heaton Township...	..	...	29	22
St. Andrew's Parish	...	...	—	—
St. John's Parish	...	...	—	—
St. Nicholas' Parish	...	...	—	—
All Saints' Parish...	...	...	—	—
			133	520
(for 1,040 families.)				

New Accom-
modation.

New accommodation has thus been provided for 1,173 families, or at the rate of 5 persons to a family, 5,865 persons, as compared with accommodation estimated for 4,475 persons provided during 1896.

SANITARY ALTERATIONS.

65 plans for minor sanitary works have been examined and approved or otherwise by the Medical Officer of Health and forwarded to the City Engineer for his consideration, as compared with 60 during the previous year.

HENRY E. ARMSTRONG, D.H.Y.,
MEDICAL OFFICER OF HEALTH.

Health Department,
Town Hall,
Newcastle-upon-Tyne.
4th April, 1898.

City and County of Newcastle-upon-Tyne, 1897.

APPENDIX A.

TABLE I.

POPULATION (ESTIMATED BY THE REGISTRAR GENERAL TO THE MIDDLE
OF THE YEAR)—217,555.

Registration Sub-districts and City.	Different Quarters of the Year.	Births Registered in 52 Weeks ended 1st January, 1898.			Deaths Registered in 52 Weeks ended 1st January, 1898.		
		Male.	Female	Total.	Male.	Female	Total.
Westgate ...	1st Quarter ...	373	414	787	209	221	430
	2nd „ ...	391	335	726	207	181	388
	3rd „ ...	378	361	739	234	220	454
	4th „ ..	357	342	699	167	180	347
	Total ...	1,499	1,452	2,951	817	802	1,619
St. Andrew's ...	1st Quarter ...	54	74	128	36	40	76
	2nd „ ...	58	67	125	42	32	74
	3rd „ ...	45	60	105	42	46	88
	4th „ ...	62	49	111	36	45	81
	Total ...	219	250	469	156	163	319
St. Nicholas' ...	1st Quarter ...	21	21	42	70	47	117
	2nd „ ..	25	17	42	84	40	124
	3rd „ ...	26	23	49	82	45	127
	4th „ ...	26	21	47	76	53	129
	Total ...	98	82	180	312	185	497
All Saints' ...	1st Quarter ...	109	99	208	68	55	123
	2nd „ ...	133	102	235	73	58	131
	3rd „ ...	122	116	238	91	68	159
	4th „ ...	141	104	245	57	62	119
	Total ...	505	421	926	289	243	532
Byker	1st Quarter ...	285	276	561	134	120	254
	2nd „ ...	323	254	577	125	107	232
	3rd „ ...	267	309	576	150	178	328
	4th „ ...	269	286	555	148	137	285
	Total ...	1,144	1,125	2,269	557	542	1,099
City	1st Quarter ..	842	884	1,726	517	483	1,000
	2nd „ ...	930	775	1,705	531	418	949
	3rd „ ...	838	869	1,707	599	557	1,156
	4th „ ...	855	802	1,657	484	477	961
	Total ...	3,465	3,330	6,795	2,131	1,935	4,066

The Births represent a rate of 31·2, and the Deaths a rate of 18·7 per 1,000 estimated population. The increase of births over deaths is 2,729 this year, as compared with 2,805 in 1896. The increase of population at Midsummer, 1897, over that at Midsummer, 1896, is estimated by the Registrar General at 5,332 persons.

TABLE II.

RETURN OF CAUSES OF DEATH IN THE REGISTRATION SUB-DISTRICTS AND ENTIRE CITY DURING THE 52 WEEKS ENDED 1ST JANUARY, 1898.

CAUSE OF DEATH.	REGISTRATION SUB-DISTRICTS AND CITY.					
	City.	Westgate.	St. Andrew's.	*St. Nicholas'.	All Saints'.	Byker.
I.—SPECIFIC, FEBRILE, OR ZYMOTIC DISEASES.						
1.— <i>Miasmatic Diseases.</i>						
Measles... ..	96	41	14	3	14	24
Scarlet Fever (Scarlatina)	13	5	...	...	2	6
Diphtheria	17	4	...	...	...	13
Whooping-Cough	62	32	5	4	11	10
Enteric (or Typhoid) Fever	17	9	...	...	2	6
Simple Continued & Ill-defined Fever	1	...	...	...	...	1
Influenza	12	8	1	...	1	2
Other Miasmatic Diseases	1	...	...	...	...	1
2.— <i>Diarrhæal Diseases.</i>						
Diarrhœa, Dysentery	142	50	13	5	11	63
3.— <i>Malarial Diseases.</i>						
(e.g., Remittent Fever, Ague)	1	...	...	...	...	1
5.— <i>Venereal Diseases.</i>						
Syphilis	13	5	2	1	...	5
Gonorrhœa, Stricture of Urethra ...	4	2	...	2	...	...
6.— <i>Septic Diseases.</i>						
Erysipelas	4	2	...	...	...	2
Pyæmia, Septicæmia	9	3	1	2	...	3
Puerperal Fever	3	2	...	1	...	...
II.—PARASITIC DISEASES.						
Thrush	2	...	...	1	...	1
Hydatids and other Animal Parasitic Diseases	1	...	...	1	...	...
III.—DIETIC DISEASES.						
Starvation and Want of Breast Milk	3	...	...	...	...	3
Chronic Alcoholism, Delirium Tremens	18	6	2	4	4	2
IV.—CONSTITUTIONAL DISEASES.						
Rheumatic Fever and Rheumatism of the Heart	7	3	1	...	...	3
Rheumatism	20	11	3	...	3	3
Gout	1	...	...	...	1	...
Rickets... ..	7	3	1	1	...	2
Cancer, Malignant Disease	143	57	11	37	10	28
Tabes Mesenterica	23	12	1	...	3	7
Tubercular Meningitis, Hydrocephalus	138	44	10	17	12	55
Carried forward	758	299	65	79	74	241

TABLE II.—CONTINUED.

RETURN OF CAUSES OF DEATH IN THE REGISTRATION SUB-DISTRICTS AND ENTIRE CITY DURING THE 52 WEEKS ENDED 1ST JANUARY, 1898.

CAUSE OF DEATH.	REGISTRATION SUB-DISTRICTS AND CITY.					
	CITY.	† Westgate.	St. Andrew's.	*St. Nicholas'.	All Saints'.	Byker.
Brought forward	758	299	65	74	75	241
IV.—CONSTITUTIONAL DISEASES, <i>Cont.</i>						
Phthisis	375	179	26	32	57	81
Other Tubercular and Scrofulous Diseases	52	26	3	6	4	13
Purpura, Hæmorrhagic Diathesis ...	1	..	...	1	...	...
Anæmia, Chlorosis, Leucocythæmia	17	2	3	3	2	7
Glycosuria, Diabetes Mellitus ...	18	6	1	3	1	7
V.—DEVELOPMENTAL DISEASES.						
Premature Birth	150	52	5	5	21	67
Atelectasis	2	1	...	...	...	1
Congenital Malformations	17	4	1	1	3	8
Old Age	210	130	21	6	19	34
VI.—LOCAL DISEASES.						
1.— <i>Diseases of Nervous System.</i>						
Inflammation of Brain or Membranes	2	1	...	...	...	1
Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis	167	78	19	5	19	46
Insanity, General Paralysis of the Insane	5	2	1	...	1	1
Epilepsy	11	2	2	...	1	6
Convulsions	120	47	8	7	25	33
Laryngismus Stridulus (Spasm of Glottis)	1	...	...	...	...	1
Paralysis Agitans, Paraplegia, Disease of Spinal Cord	8	3	...	4	1	...
Other Diseases of Nervous System	18	6	3	2	1	6
2.— <i>Diseases of Organs of Special Sense.</i>						
(e.g., Ear, Eyes, and Nose)	8	2	1	2	...	3
3.— <i>Diseases of Circulatory System.</i>						
Endocarditis, Valvular Diseases of Heart	59	24	2	17	3	13
Pericarditis	1	...	...	1	...	...
Other Diseases of Heart	202	74	20	23	31	54
Aneurism	11	...	...	7	1	3
Embolism, Thrombosis	4	3	...	1	..	...
Other Diseases of Blood Vessels ...	8	5	1	...	...	2
4.— <i>Diseases of Respiratory System.</i>						
Croup	24	9	..	6	2	7
Laryngitis	13	5	2	...	4	2
Carried forward	2,262	960	184	211	270	637

TABLE II.—CONTINUED.

RETURN OF CAUSES OF DEATH IN THE REGISTRATION SUB-DISTRICTS AND ENTIRE CITY DURING THE 52 WEEKS ENDED 1ST JANUARY, 1898.

CAUSE OF DEATH.	REGISTRATION SUB-DISTRICTS AND CITY.					
	CITY.	† Westgate.	St. Andrew's.	*St. Nicholas'.	All Saints'.	Byker.
Brought forward	2,262	960	184	211	270	637
<i>4.—Diseases of Respiratory System.</i> (Continued.)						
Bronchitis	242	109	18	10	34	71
Pneumonia	191	81	16	12	28	54
Pleurisy	16	7	..	1	4	4
Emphysema, Asthma	20	13	..	3	..	4
Other Diseases of Respiratory System	33	9	..	5	2	17
<i>5.—Diseases of Digestive System.</i>						
Dentition	46	22	3	..	6	15
Tonsillitis, &c.	2	..	..	..	2	..
Diseases of Stomach	32	13	3	1	3	12
Enteritis	57	18	5	..	8	26
Peritonitis	39	8	2	11	5	13
Obstructive Diseases of Intestine ...	20	3	1	11	1	4
Cirrhosis of Liver	30	14	1	5	4	6
Jaundice and other Diseases of Liver	26	12	4	4	2	4
Other Diseases of Digestive System	177	75	10	12	41	39
<i>6.—Diseases of Lymphatic System.</i> (e.g., of Lymphatics and of Spleen)						
	4	1	..	..	..	3
<i>8.—Diseases of Urinary System.</i>						
Nephritis	36	15	1	10	3	7
Bright's Disease, Albuminuria ...	21	6	3	5	1	6
Disease of Bladder and of Prostate	7	1	1	1	..	4
Other Diseases of the Urinary System	20	6	1	9	..	4
<i>9.—Diseases of Reproductive System.</i> (A) Of Organs of Generation.						
Female Organs	19	1	4	9	..	5
(B) Of Parturition.						
Abortion, Miscarriage	1	1	..	..	..	..
Puerperal Convulsions	2	..	..	1	..	1
Placenta Prævia, Flooding	6	2	1	..	1	2
Other Accidents of Childbirth ...	22	14	..	2	2	4
<i>10.—Diseases of Locomotive System.</i>						
Caries, Necrosis	6	4	..	1	1	..
Arthritis, Ostitis, Periostitis ...	6	2	2	..	..	2
Other Diseases of Locomotive System	4	..	2	1	..	1
<i>11.—Diseases of Integumentary System.</i>						
(e.g., Carbuncle, Phlegmon, Cellulitis)	4	2	..	1	..	1
Other Diseases of Integumentary System	5	1	1	1	1	1
Carried forward	3,356	1,400	263	327	419	947

TABLE II.—CONTINUED.

RETURN OF CAUSES OF DEATH IN THE REGISTRATION SUB-DISTRICTS AND ENTIRE CITY DURING THE 52 WEEKS ENDED 1ST JANUARY, 1898.

CAUSE OF DEATH.	REGISTRATION SUB-DISTRICTS AND CITY.					
	City.	† Westgate.	St. Andrew's.	* St. Nicholas.	All Saints.	Byker.
Brought forward	3,356	1,400	263	327	419	947
VII.—VIOLENCE.						
1.— <i>Accident, Negligence, &c.</i>						
Fracture and Contusion	85	11	2	58	8	6
Gunshot Wound	1	...	...	1	...	...
Burn and Scald	30	3	1	19	2	5
Poison	12	1	2	6	1	2
Drowning	5	1	...	1	2	1
Suffocation	28	14	4	1	3	6
Hernia	20	4	2	12	...	2
Deaths consequent on Surgical Operation	9	...	3	4	...	2
Otherwise	3	1	1	...	...	1
2.— <i>Homicide.</i>						
Murder and Manslaughter	3	...	...	3	...	...
3.— <i>Suicide.</i>						
Cut, Stab	2	1	...	...	...	1
Poison	4	...	...	2	2	...
Hanging	4	2	...	...	1	1
Otherwise	1	1	...	...	...	...
VIII.—DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES.						
Dropsy	5	2	...	...	...	3
Debility, Atrophy, Inanition	289	111	20	18	61	79
Mortification	4	3	...	...	...	1
Tumour	23	5	2	7	3	6
Abscess... ..	19	3	2	9	2	3
Hæmorrhage	13	6	2	4	...	1
Sudden Death (cause not ascertained)	1	...	...	...	1	...
Found Dead (cause not stated)	15	1	1	6	6	1
Other Causes not Specified or Ill-defined	134	49	14	19	21	31
TOTALS	4,066	1,619	319	497‡	532	1,099

† Includes Union Workhouse.

* Includes Royal Infirmary.

‡ The number of Deaths is increased by 363 in the Royal Infirmary, 209 of which came to that Institution from beyond the City. In 20 other Infirmary cases the residences are not stated in the returns.

TABLE III.

ANNUAL DEATH-RATE FROM ALL CAUSES AND FROM THE SEVEN "CHIEF ZYMOTIC DISEASES" PER 1,000 LIVING IN NEWCASTLE, COMPARED WITH THE AVERAGE RATES IN THE LARGE TOWNS OF THE UNITED KINGDOM.

	All Causes.		Seven "Chief Zymotic Diseases."*	
	1897.		1897.	
	Average in 33 Towns.	Rate in New-castle.	Average in 33 Towns.	Rate in New-castle.
1st Quarter	19·2	18·4	1·69	1·06
2nd „	16·9	17·4	1·70	1·08
3rd „	21·2	21·3	5·73	3·16
4th „	19·0	17·7	2·34	1·08
Annual Rate	19·1	18·7	2·87	1·60

* Includes Smallpox, Scarlet Fever, Diphtheria, Typhus, Enteric, and Continued "Fevers", Measles, Whooping-Cough, and Diarrhœa.

TABLE IV.—AGES AT DEATH.

Periods.	REGISTRATION SUB-DISTRICTS.					
	Westgate.	St. Andrew's.	St. Nicholas'.	All Saints'.	Byker.	Total in City.
Under 1 Year	482	85	50	185	401	1,203
1 Year and under 5 Years ..	182	33	45	82	175	517
5 Years „ 20 „ ...	85	17	56	38	83	279
20 „ „ 40 „ ..	190	50	125	69	119	553
40 „ „ 60 „ ...	287	52	158	82	138	717
60 „ „ 80 „ ...	339	65	58	67	152	681
80 „ and upwards ...	54	17	5	9	31	116
Total (all ages) dying } during 52 weeks ended } 1st January, 1898 .. }	1,619	319	497	532	1,099	4,066

TABLE V.

ADMISSIONS TO AND DEATHS AT THE CITY HOSPITAL FOR INFECTIOUS DISEASES
(OTHER THAN SMALLPOX AND CHOLERA) DURING THE YEAR 1897.

DISEASES.	ADMISSIONS.													DEATHS.											
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	Jan.	Feb.	Mar.	April.	June.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	
Measles	11	1	4	2	2	1	8	1	...	5	3	1	39	...	...	...	...	...	...	1	...	...	...	1
German Measles ... ..	...	48	3	...	1	2	...	...	...	...	31	19	104	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever and Measles ... ..	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	16	7	6	9	12	6	15	15	17	52	23	21	199*	1	...	1	1	...	...	...	2	1	...	6
Scarlet Fever and Varicella..	...	2	4	1	...	...	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever and Diphtheria	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	1	1	...
Scarlet Fever and Acute Miliary Tuberculosis ...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	1
Scarlet Fever and Meningitis	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever and Broncho Pneumonia...	...	...	...	1	...	...	...	1	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	1
Diphtheria	1	...	1	...	...	...	...	1	1	3	1	1	9†	...	...	...	...	...	...	...	1	...	...	1
Diphtheria and Pneumonia ...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1
Enteric Fever	6	8	8	8	3	2	1	3	5	13	4	2	63‡	5	...	1	1	2	...	1	4	3	...	17	
Enteric Fever and Pneumonia	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ... ..	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ... ..	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Eczema... ..	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
General Paralysis of the Insane ... ..	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	1
Pleurisy and Pneumonia ...	...	...	...	...	...	1	...	1	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	1
Tonsillitis	1	...	...	...	...	...	...	...	...	3	...	...	4	...	...	...	...	...	...	1	...	...	...	1
Gastro-Enteritis ... ..	...	...	...	1	1	...	...	...	...	...	...	1	3	...	...	...	...	...	...	...	...	...	...	...
Surgical Case ... ..	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
TOTAL	37	66	26	24	21	12	24	23	24	76	65	45	443	7	1	2	2	3	2	2	7	5	1	32	

The Deaths in the City Hospital for Infectious Diseases, 32 in number, are included in the Returns for the Walker Urban District.

* Includes 1 Nurse and the Engineer at Hospital, and 4 cases from the Walker Urban District.

† „ 1 Nurse at the Hospital.

‡ „ 4 cases from the Walker Urban District.

TABLE VA.

SMALLPOX HOSPITAL.—1897.—Admissions—Nil.

CHOLERA HOSPITAL.—1 admission—Proved non-infectious.

TABLE VI.

INFECTED ARTICLES DESTROYED AND REPLACED BY THE HEALTH DEPARTMENT.

	1897.	1896.
Half Straw Mattresses	512	162
Straw Beds	9	4
Flock „	8	3
Bed Ticks	2	7

INFECTED ARTICLES PURIFIED IN THE DISINFECTING APPARATUS AT THE CITY
HOSPITAL FOR INFECTIOUS DISEASES, WALKER GATE.

ARTICLES FROM CITY.		HOSPITAL PROPERTY.	
1897.	1896.	1897.	1896.
27,986	21,351	1,523.	1,684

TABLE VII.

RETURN OF SUSPECTED AND UNWHOLESOME PROVISIONS INSPECTED DURING
THE YEAR 1897.

PROVISIONS INSPECTED.	Amount of Suspected Provisions Inspected.	CONDITION.		BAD—HOW DISPOSED OF.	
		Fit for Food.	Unfit for Food.	Destroyed by Order of Justice.	Destroyed with Owner's Consent.
Carcases of Beef ...	126	54	72	5	67
Quarters of Beef ...	1,114	1,083	31	20	11
Carcases of Veal ...	38	7	31	...	31
Carcases of Mutton ...	204	44	160	...	160
Carcases of Pork ...	221	130	91	...	91
Pickled Beef & Mutton...	23st. 11lb.	...	23st. 11lb.	11st. 11lb.	12st.
Bacon (Pounds) ...	141	...	141	...	141
Ox Heads ...	15	...	15	...	15
Sheep Heads ...	53	...	53	...	53
Sheep Plucks ...	38	...	38	...	38
Pig Kidneys ...	23	...	23	...	23
Geese ...	38	24	14	...	14
Turkeys ...	40	8	32	...	32
Chickens ...	90	...	90	...	90
Ducks ...	90	...	90	...	90
Hares ...	78	...	78	...	78
Rabbits (Couples) ...	190	...	190	...	190
Capercaillies (Brace) ..	7	...	7	...	7
Ptarmigan (Brace) ...	22	...	22	...	22
Eggs ..	9,600	...	9,600	...	9,600
Apples (Barrels)...	4	...	4	...	4
Pears (Barrels) ...	11	...	11	...	11
Pears (Bags) ...	27	...	27	...	27
Plums (Baskets)...	62	...	62	...	62
Cherries (Baskets) ...	27	...	27	...	27
Gooseberries (Baskets) ...	18	...	18	18	...
Tomatoes (Stones) ...	57	...	57	...	57

A large number of the quarters of beef were imported dead meat from Denmark. 18 were found to be diseased or unsound, and were destroyed. Of the 72 carcasses of beef returned as bad, 14 of the animals were sold in public markets; when slaughtered, they were found affected with tubercle, and were destroyed.

Seven persons were summoned for exposing bad meat for sale. Two of the cases resulted in fines of £20 and costs each, three £10 and costs each, one £5 and costs, and one 40s. and costs.

WM. HEDLEY, INSPECTOR.

TABLE VIII.

SUMMARY OF NUISANCES FOR THE ABATEMENT OF WHICH NOTICES
HAVE BEEN SERVED DURING 1897.

Foul privies and ashpits to replace with water-closets or pail-closets ...	296
Cellar dwellings not in conformity with law (to be closed or not used separately as dwellings)	7
Dirty or dilapidated rooms (to be cleaned or repaired)	166
Insufficient privy accommodation (additional water-closets or pail-closets ordered)	61
Foul ashpits not connected with privies (to remove and provide tubs)...	201
Defective tubs (to provide new tubs)	118
Insufficient tubs for dry house refuse (to provide additional tubs) ...	105
*Defective water-closets	167
*Water-closets without water supply	66
*Choked water-closets (mostly served on tenants)	434
*Dirty water-closets (all served on tenants)	58
†Defective pail-closets	725
†Dirty pail-closets (all served on tenants)	85
Smoke nuisances (to abate)	10
Overcrowding (to abate)	50
Defective pavement in yards and passages (to repair)	180
Dirty yards and passages (to cleanse)	334
Defective drains, sinks, soil-pipes, &c. (to cleanse, repair, or construct new drains)	1,227
Broken roofs and water spouting (to repair)	267
Want of water supply (to provide)	209
Animals, pigeons, and fowls improperly kept (to remove)	43
Accumulations of manure (to periodically remove)	161
Offensive accumulations (to remove)	67
Unclassified minor nuisances (to abate)	20
Want of sanitary conveniences in public houses (to provide)	1
Totals	5,058

*To repair or cleanse. †To provide new pans, or to repair the roofs, seats, and floors, or to cleanse.

(Signed,) W. H. WELLS,

INSPECTOR OF NUISANCES

TABLE IX.

DETAILS RELATING TO CERTAIN WORKS CARRIED OUT IN THE ABATEMENT
OF NUISANCES DURING 1897.

Length in yards of old drains removed	...	...	...	...	...	...	3,296
„ „ new „ constructed	...	..	...	..	...	...	3,814
New trapped gullies provided to drains	...	...	...	...	...	...	376
Combined privies and ashpits removed	}	privies	...	...	..	...	*185
							*116
Pail-closets (emptied through the houses) removed	...	...	...	...	...	...	5
Water-closets provided	...	..	...	...	..	...	†156
Pail-closets „	...	...	...	...	...	...	‡110
Foul “container” closets removed, and closets of a better design substituted	...	...	...	...	...	...	34
Dry ash-tubs substituted for dry ash-pits where water-closets existed...	...	...	...	...	...	...	86
Cellar dwelling prevented from being occupied separately	...	...	...	...	...	...	1
No. of drains tested by smoke	...	...	...	...	...	...	1,155
No. of smoke tests made	...	...	...	...	...	...	1,342
No. of complaints made at office (verbally or by letter)	...	...	...	...	...	...	754
No. of tenement inspections made	...	..	...	...	...	...	22,027
No. of contraventions of Tenement Bye-laws for which notices have been served to obtain remedy	...	...	...	...	...	...	||1,455
Inspections of houses made from complaints received outdoors or nuisances discovered in the district, including a large number of minor nuisances, such as choked drains and dirty yards, the abatement of which was accomplished at the time of visit, and without legal notice	...	...	...	...	...	...	8,838
Inspections to learn if works ordered were in progress	...	...	...	...	...	...	8,511
Common yards and courts in the worst localities specially visited on Friday afternoons and Saturday mornings to obtain weekly cleansing of same	..	...	...	...	...	...	21,787
Inspections after infectious disease	...	...	...	...	...	...	525
Supervisions of works in progress	..	..	...	...	...	...	2,771
Inspections of milk shops	...	...	...	...	...	...	1,624
„ bakehouses	...	...	...	...	...	...	516
„ offensive trades	...	...	...	...	...	...	591

* Some ashpits have more than one privy attached.

† 32 of these have been provided on premises where the accommodation was previously insufficient.

‡ 19

|| In addition to this number the “District Inspectors have daily” had premises cleansed by verbal order.

(Signed) W. H. WELLS,

INSPECTOR OF NUISANCES.

TABLE X.

SUMMARY OF LEGAL PROCEEDINGS ORDERED TO BE TAKEN BEFORE
THE MAGISTRATES FOR THE ABATEMENT OF NUISANCES, &c., DURING
THE YEAR 1897.

Nature of Complaint.	No. of Cases.	How disposed of.	Amount of Penalties Imposed.
			£. s. d.
Foul privies and Ash-pits.	9	Nuisances abated before the summonses were applied for	
Want of Privy Pails, Pails defective, &c.	25	In 22 cases nuisances abated before summonses were applied for. In 1 case summons was withdrawn, defendant paying costs; 1 summons withdrawn by the Committee; 1 defendant fined 40/- and costs.	2. 0. 0.
Choked and defective Drains.	25	In 23 cases nuisances abated before the summonses were applied for. 1 summons not issued; 1 summons withdrawn, defendant paying costs.	
Defective Yard Pavements and Unpaved Yards.	6	In 5 cases nuisances abated before summonses were applied for. 1 withdrawn, defendant paying costs.	
Defective Roofs and Spouts.	10	Nuisances abated before the summonses were applied for.	
Defective Water-closet	1	Ditto.	
Accumulations of refuse	3	Ditto.	
Cellar dwelling.	1	Closed before the summons was applied for.	
Manure Pit full.	1	Work done, summons not issued.	
Want of tubs for dry house refuse.	13	Nuisances abated before the summonses were applied for.	
Stagnant water under the floors.	1	Summons withdrawn, defendant pay-costs.	
<i>Tenement Bye-laws—</i>			
Contravention of Bye-law No. 31, lime-washing passages and staircases.	10	Nuisances abated before the summonses were applied for.	
<i>Carried forward...</i>	105		£ 2. 0. 0.

TABLE X.—CONTINUED.

SUMMARY OF LEGAL PROCEEDINGS ORDERED TO BE TAKEN BEFORE
THE MAGISTRATES FOR THE ABATEMENT OF NUISANCES, &c., DURING
THE YEAR 1897.

Nature of Complaint.	No. of Cases.	How disposed of.	Amount of Penalties Imposed.
<i>Brought forward ..</i>	105		£ s. d. 2. 0. 0.
<i>Tenement Bye-Laws</i> (Continued)—			
Contravention of Bye-law No. 12, insufficient Water-closet accommodation.	13	In 3 cases summonses withdrawn on work being done, defendant paying costs; in 10 cases work done before the summonses were applied for.	
Contravention of Bye-law Nos. 4 and 6, Overcrowding.	5	Nuisances abated before the summonses were applied for.	
Contravention of Bye-law No. 34, no water supply for domestic purposes.	4	Ditto.	
Contravention of Bye-law No. 17, defective Privy Pails.	2	Ditto.	
Contravention of Bye-law No. 19, Dirty Pail-closets.	1	Nuisance abated before the summons was applied for.	
Contravention of Bye-law No. 28, Pigeons improperly kept.	1	Ditto.	
Contravention of Bye-law No. 26, refuse in closet.	1	Ditto.	
Contravention of Bye-law No. 16, Water-closet apparatus out of order.	1	Ditto.	
Contravention of Bye-law No. 32, Dirty Room,	1	Ditto.	
Contravention of Bye-law No. 33, Defective Pavement.	1	Ditto.	
<i>Newcastle-upon-Tyne Improvement Act, 1870</i> Drains not laid with Water-tight Joints.	2	Defendants summoned and fined 40/- and costs each.	4. 0. 0.
Total	137		£ 6. 0. 0.

(Signed) W. H. WELLS,
INSPECTOR OF NUISANCES AND COMMON LODGING HOUSES.

TABLE XI.

FOOD AND DRUGS ADULTERATION ACTS.
SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1897.

Articles taken for Analysis.	No. of Samples	Result of Analysis.	Proceedings Taken.
New Milk ...	266	238 genuine. 1 contained 17% of fat less than natural. 1 contained 32·7% of fat less than natural. 1 contained 13% of fat less than natural. 1 contained 16·7% of fat less than natural. 1 contained 12·94% of added water. { 1 contained 4·35% of added water, and 17·8% of fat less than natural } 1 contained 6·24% of added water. 9 of doubtful genuineness. 11 of poor quality.	Vendor summoned and fined 5/- and costs. Vendor summoned and fined 40/- and costs. Vendor summoned and case withdrawn, defendant paying costs. Vendor summoned and fined 1/- and costs. Vendor summoned and fined 5/- and costs. Vendor summoned and fined 120/- and costs. Vendor summoned and fined 10/- and costs.
Condensed Milk	10	Genuine.	
Butter ...	37	27 genuine. 1 contained 18·5% of water which is excessive. 9 of doubtful genuineness	Letter of caution sent by the Medical Officer of Health.
Whisky ...	6	5 genuine. 1 contained 21·2% of water in excess of standard.	Vendor summoned and fined £10 and costs.
Margarine ...	1	Genuine.	
Coffee ...	6	3 sold as a mixture of Chicory and Coffee. 1 contained 49% of Chicory	Letter of caution sent by the Medical Officer of Health. 2 summoned to the Committee and cautioned by them.
Sugar ...	6	Genuine.	
Ground Ginger	5	Genuine.	
Flour ...	4	Genuine.	
Arrowroot ...	3	Genuine.	
Lard ...	2	Genuine.	
Cheese ...	6	1 certified to contain 0·017 grains of zinc per lb. of cheese; 1 certified to contain 0·028 of zinc per lb. of cheese.	Letters of caution sent by the Medical Officer of Health.
Malt Vinegar	3	4 genuine. Genuine.	
White Pepper	5	Genuine.	
Black Pepper	1	Genuine.	
Corn Flour..	1	Genuine.	
Ground Rice	1	Genuine.	
Carried forward }	363		£19. 1s. 0d.

TABLE XI.—CONTINUED.

FOOD AND DRUGS ADULTERATION ACTS.
SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1897.

Articles taken for Analysis.	No. of Samples	Result of Analysis.	Proceedings Taken.
Brought forward }	363		£19. 1s. 0d.
Composition			
Essence ...	1	Genuine.	
Castor Oil ...	1	Genuine.	
Gregory's Powder ...	1	Genuine.	
Tinned Tomatoes...	2	Contained 0·012 grains of lead per lb.	
Tinned Apricots ...	1	Contained 0·013 grains of lead per lb., and 0·091 grains of tin per lb. of fruit and syrup.	
Tinned Peaches ...	2	1 contained 0·014 grains of lead per lb., and 0·049 grains of tin per lb. of fruit and syrup; 1 contained 0·024 grains of lead per lb.	
Tinned Pears	2	1 contained 0·028 grains of lead per lb., and 0·049 grains of tin per lb. of fruit and syrup; 1 contained 0·014 grains of lead per lb.	
Tinned Pine-apple ...	1	Contained 0·023 grains of lead per lb., and 0·345 grains of tin per lb. of fruit and syrup.	
Glycerine ...	23	17 genuine; 1 of doubtful genuineness; 1 contained 15% of glucose syrup; 1 contained 50% of glucose syrup; 1 contained 22% of water; 1 contained 50% of glucose syrup; 1 contained 30% of glucose syrup.	Letter of caution sent by the Town Clerk to the Wholesale Dealers, and letter of caution sent by the Inspector to the Retail Dealers.
Total ..	<u>397</u>		Total amount of penalties <u>£19. 1s. 0d.</u>

(Signed), W. H. WELLS,

INSPECTOR UNDER THE FOOD AND DRUGS ADULTERATION ACTS.

TABLE XII.

REGISTERED COMMON LODGING HOUSES.
SUMMARY OF WORK DONE AND VISITS MADE DURING THE YEAR 1897.

Inspections made in the Daytime	12,075
,, ,, Night-time	932
Notices served { <i>re</i> Washing of Bed Clothes 260 }	398
{ ,, Lime Washing of Houses 138 }	
Contraventions of Bye-laws <i>re</i> Separation of Sexes	1
,, ,, ,, Cleaning and Ventilation of Houses	7
,, ,, ,, Removal of Liquid Filth	8
Structural Repairs to Houses	11
Choked Drains, Defective Water-closets, &c. (Cleansed and Repaired)	88
Tubs provided for Dry House Refuse	3
Defective Roofs and Spouts	27
Yards in a Filthy condition	7
Houses Closed	4
New Houses Registered	6
Additional Lavatory Basins Provided	8
,, Water-closets provided	3
House without Water Supply (temporarily)	8
Infectious Disease (Whooping Cough)	1
,, ,, (Measles)	4
Deaths Reported (none from Infectious Diseases)	15
Inquiries <i>re</i> Supposed Common Lodging Houses	5
Applications for Registration	9
Granted	6
Refused	3
Notice served <i>re</i> keeping Common Lodging House on un-registered premises	1
Single beds provided during the year in place of 127 double ones	254
New Single beds provided during the year	198

TABLE XIII.

LODGERS OCCUPYING COMMON LODGING HOUSES IN THE CITY
DURING THE YEAR 1897.

	Year. 1897.	Corresponding Nos for Year 1896.
Average number of Lodgers per night	1507	1317
Highest number on any one night	1597	1495
lowest ,, ,, ,, ,, ,, ,, ,, ,, ,,	1372	1244
Number of Lodgers for which accommodation was provided in the Common Lodging Houses of the City at the end of the year..	2058	1865

(Signed) W. H. WELLS,

INSPECTOR OF COMMON LODGING HOUSES,

